



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,074	03/31/2004	Stephen R. Lawrence	24207-10081	7346
63296 7590 11/18/2008 GOOGLE / FENWICK SILICON VALLEY CENTER 801 CALIFORNIA ST. MOUNTAIN VIEW, CA 94041				
EXAMINER				
TIMBLIN, ROBERT M				
ART UNIT		PAPER NUMBER		
2167				
MAIL DATE		DELIVERY MODE		
11/18/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/815,074

**Applicant(s)**

LAWRENCE ET AL.

**Examiner**

ROBERT TIMBLIN

**Art Unit**

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date 3/14/2008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

#### **DETAILED ACTION**

This Office Action corresponds to application 10/815,074 and Applicant's remarks/amendments made thereto submitted on 9/12/2008.

#### ***Response to Amendments***

Claims 1, 13, 14, 18-20, and 22-28 have been amended. Claims 1-28 have been examined and are pending prosecution.

#### ***Claim Objections***

Examiner respectfully thanks Applicant for the correcting amendments addressing the prior claim objections. Accordingly, those objections are withdrawn.

In response to the amendment, the Examiner objects to Claim 1 because, in the *locating* step, "the query result" should be "the merged query result" because the first piece of information is derived from the merged query result. Claims 18 and 25 are similarly objected to for the same rationale.

Claim 18 is objected to because it recites *executable* instructions without any indication of actual execution of the instructions to facilitate a function. Thus, the claim is not positively recited to solve a practical application.

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18-21 are now accepted under 35 U.S.C. 101 for the inclusion of a computer-readable storage medium. As an interpretation gleaned from the specification (e.g. paragraph 0012), a computer-readable storage medium is best seen as electronic, optical, or magnetic media (such as a hard drive) and thus can be seen as statutory. Because these claims preclude the use of transmission media, the claims are seen as statutory.

Claims 25-28 are now accepted under 35 U.S.C. 101 for the inclusion of a computer processor which is best seen as a hardware element, thus precluding the interpretation of claiming software per se.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8-15, 18-20, and 22-28 are rejected under 35 U.S.C. 102(c) as being anticipated by Barrett et al. ('Barrett' hereafter) (U.S. Patent Application 2003/0135490). Barrett teaches the claims in the following drawing references of figures 1-2 and the following cited paragraphs.

With respect to claim 1, A computer-implemented method for ranking information, comprising:

receiving a plurality of query results (0037; results from a query family as well as figure 2 showing a merged collection of information A-D) of a plurality of search queries (0037; Barret's system may use a query family (or logical grouping of queries) as well as figure 2 showing Q1-4 as a plurality of queries);

merging the plurality of query results into a merged query result (figure 2; e.g. the merging of Information A-C), the merged query result being associated with the plurality of search queries (Q1-Q4);

determining a first ranking sequence of a the merged query result (0010; i.e. a request is made against an existing index of the collection of information. Search results indicative of information are returned to the user based on ranking associated with the index. Also, Barrett teaches original rankings to describe a first ranking sequence);

presenting the merged query result (fig. 2 and results from a query family) to a user according to the first ranking sequence (0010; i.e. presenting results based upon original rankings);

identifying an input signal from the user (drawing reference 12) indicating an interest (figure 22, drawing reference 8 and 0012; i.e. a user selects information that satisfies their needs) in a first piece of information (drawing reference 8; i.e. a first information is selected) in the merged query result (figure 2, information A-B);

identifying a search query (figure 1, drawing reference 2 and figure 2; e.g. Q1) from the plurality of search queries associated with the merged query result (figure 2; e.g. the merging of Information A-C from a query family), the identified search query (e.g. Q1) being associated with a query result including the first piece of information (step 2, figure 1) the query result from among the plurality of query results (e.g. Information A from information A-C);

adjusting a query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) associated with the identified search query (figure 2; i.e. the factors are calculated for the EPS which is given to a query; 0043) responsive to the input signal (drawing reference 12);

locating a second piece of information in the query result associated with the identified search query (drawing reference 12; i.e. user selects another information from the results);

determining a score (EPS, 0047) for the second piece of information (step 14, figure 1) based at least in part on the query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) associated with the search query (figure 1, drawing reference 2 and figure 2; e.g. Q1);

determining a second ranking sequence (0005, last 5 lines of 0038; i.e. the adjusting of final result rankings, and 0045 describes a ranking other than the original ranking) of the merged query result based at least in part on the score (figure 1, step 20 and figure 2); and

presenting the merged query result (6) to the user according to the second ranking sequence (0010; i.e. results are returned to the user based upon the index (which has matured (0045) over the ranking process).

With respect to claim 2, Barrett teaches the method of claim 1, wherein the input signal indicates a selection of the first piece of information (0004).

With respect to claim 3, Barrett teaches the method of claim 1, wherein the input signal comprises lack of selection of the first piece of information for at least a specified amount of time where the first piece of information is displayed to the user (0012, step 16).

With respect to claim 4, Barrett teaches the method of claim 1, wherein the input signal comprises user activity associated with the first piece of information (0004, user clicking).

With respect to claim 5, Barrett the method of claim 4, wherein the user activity comprises one or more of viewing duration, scrolling, mouse movement, selection of links from the piece of information, saving, printing, and bookmarking (0012, step 16).

With respect to claim 6, Barrett teaches the method of claim 4, wherein the input signal further comprises user activity associated with articles linked from the first piece of information (0012, step 12 and figure 1).

With respect to claim 8, Barrett teaches the method of claim 1, wherein the input signal comprises a user rating (0005 use rate and 0037 feedback).

With respect to claim 9, Barrett teaches the method of claim 1, wherein one of the plurality of search queries comprises one of query type, query term, application, type of application, article type, and event type (0010, 0013, and 0037).

With respect to claim 10, Barrett teaches the method of claim 9, wherein the query type comprises one of current sentence, current paragraph, text near the cursor, extracted terms, and identified entries (0010).

With respect to claim 11, Barrett teaches the method of claim 1, wherein the score comprises a relevance score (0013).

With respect to claim 12, Barrett teaches the method of claim 1, wherein the score comprises a popularity score (0043, EPS).

With respect to claim 13, Barrett teaches the method of claim 1, further comprising increasing a refresh rate of a display (0016-0019 and 0053) of the merged query result (fig. 2 and results from a query family) to the user responsive to receiving input signals at an increasing frequency (0039).



With respect to claim 14, Barrett teaches the method of claim 1, wherein the input signal is a first input signal and the interest is a first interest, further comprising:

receiving a second input signal indicating a second interest in a third piece of information (0012, figure 1, selecting more information); and

varying a refresh rate of a display of the merged query result (fig. 2 and results from a query family) to the user (0004) based at least in part on the duration between receiving the first input signal and the second input signal (0053, clicking behavior).

With respect to claim 15, Barrett teaches the method of claim 1, wherein the input signal comprises multiple input signals (0041, tracking clicks).

With respect to claim 18, (Currently Amended) A computer program product having a computer-readable medium having computer program instructions tangibly embodied thereon for ranking information, the computer program instructions comprising instructions for:

receiving a plurality of query results of a plurality of search queries (0037; e.g. the system may be used by a query family to suggest multiple queries);

merging the plurality of query results into a merged query result (fig. 2 and results from a query family, the merged query result (fig. 2 and results from a query family) being associated with the plurality of search queries (0037; query family);

determining a first ranking sequence of a merged query result (0010; i.e. a request is made against an existing index of the collection of information. Search results indicative of information are returned to the user based on ranking associated with the index. Also, Barrett

teaches original rankings to describe a first ranking sequence) including information retrieved from query results for a plurality of search queries (0037; e.g. the system may be used by a query family to suggest multiple queries);

presenting the merged query result (fig. 2 and results from a query family) to a user according to the first ranking sequence (0010; i.e. presenting results based upon original rankings);

identifying an input signal from the user (drawing reference 12) indicating an interest (figure 22, drawing reference 8 and 0012; i.e. a user selects information that satisfies their needs) in a first piece of information (drawing reference 8; i.e. a first information is selected) in the merged query result (figure 2, information A-B)

identifying (figure 2; e.g. Q1 is differentiated in that it is identified by a different EPS than given to the other queries) a search query (figure 1, drawing reference 2 and figure 2; e.g. Q1) from the plurality of search queries (Q1-Q4) associated with the merged query result (fig. 2 and results from a query family), the identified search query (e.g. Q1) being associated with a query result including the first piece of information (step 2, figure 1);

locating a second piece of information in the query result associated with the identified search query (drawing reference 12; i.e. user selects another information from the results);

adjusting a query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) with the identified search query (e.g. Q1) responsive to the input signal (drawing reference 12);

determining a search query (figure 1, drawing reference 2 and figure 2; e.g. Q1) associated with a second piece of information (figure 1, step 12; i.e. a second information is selected) from the collection (figure 2);

determining a score (EPS, 0047) for the second piece of information (step 12, figure 1) based at least in part on the query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) associated with the identified search query (figure 1, drawing reference 2 and figure 2; e.g. Q1);

determining a second ranking sequence (0005, last 5 lines of 0038; i.e. the adjusting of final result rankings, and 0045 describes a ranking other than the original ranking) of the merged query result (fig. 2 and results from a query family) based at least in part on the score (figure 1, step 20 and figure 2); and

presenting the merged query result (fig. 2 and results from a query family) to the user according to the second ranking sequence (0010; i.e. results are returned to the user based upon the index (which has matured (0045) over the ranking process.

With respect to claim 19, Barrett teaches the computer program product of claim 18, the executable computer program instructions further comprising instructions for increasing a refresh rate of a display (0016-0019 and 0053) of the merged query result (fig. 2 and results from a query family) to the user responsive to receiving input signals at an increasing frequency (0039).

With respect to claim 20, Barrett teaches the computer program product of claim 18, the executable computer program wherein the input signal is a first input signal and the interest is a first interest the computer program instructions further comprising instructions for:

receiving a second input signal indicating a second interest in a third piece of information (0012, figure 1, selecting more information); and

varying a refresh rate of a display of the merged query result (fig. 2 and results from a query family) to the user (0004) based at least in part on the duration between receiving the first input signal and the second input signal (0053, clicking behavior).

With respect to claim 22, Barrett teaches the method of claim 1, wherein determining the second ranking sequence comprises:

determining the second ranking sequence (0005, last 5 lines of 0038; i.e. the adjusting of final result rankings, and 0045 describes a ranking other than the original ranking) of at least some of the merged query result (fig. 2 and results from a query family) based at least in part on the score, the at least some of the merged query result (fig. 2 and results from a query family) associated with at least two search queries (0037; e.g. the system may be used by a query family to suggest multiple queries).

With respect to claim 23, the method of claim 1, further comprising:

generating the plurality of search queries (0037, query family); and

adding information from results of the plurality of search queries into the merged query result (fig. 2 and results from a query family).

With respect to claim 24, Barrett teaches the computer program product of claim 18, the computer program instructions further comprising instructions for

generating the plurality of search queries (0037; e.g. the system may be used by a query family to suggest multiple queries) associated with the merged query result (fig. 2 and results from a query family); and

adding information (18) from results of the plurality of search queries into the merged query result (0049).

With respect to claim 25, A query system for ranking information comprising:

a computer processor for executing computer program instructions;

a computer-readable storage medium having executable computer program instructions tangibly embodied thereon, the executable computer program instructions comprising instructions for:

a plurality of query results (0037; results from a query family as well as figure 2 showing a merged collection of information A-D) of a plurality of search queries (0037; Barret's system may use a query family (or logical grouping of queries) as well as figure 2 showing Q1-4 as a plurality of queries);

a module (0012; system) configured to merge the plurality of query results into a merged query result (figure 2; e.g. the merging of Information A-C), the merged query result being associated with the plurality of search queries (Q1-Q4);

a module (0012; system) configured to determine a first ranking sequence of a merged query result (0010; i.e. a request is made against an existing index of the collection of information. Search results indicative of information are returned to the user based on ranking associated with the index. Also, Barrett teaches original rankings to describe a first ranking sequence);

a module (0012; system) configured to present the merged query result to a user according to the first ranking sequence (0010; i.e. presenting results based upon original rankings;

a module (0012; system) configured to identify an input signal from the user (drawing reference 12) indicating an interest (figure 22, drawing reference 8 and 0012; i.e. a user selects information that satisfies their needs) in a first piece of information (drawing reference 8; i.e. a first information is selected) in the merged query result (figure 2, information A-B);

a module (drawing reference 10) configured to identify a search query (figure 1, drawing reference 2 and figure 2; e.g. Q1) from the plurality of search queries associated with the merged query result, the identified search query being associated with the first piece of information (step 2, figure 1), the query result from among the plurality of query results (fig. 2 and results from a query family);

a module (drawing reference 14) configured to adjust a query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) responsive to the input signal (drawing reference 12);

a module (drawing reference 12) configured to locate a second piece of information in the query result associated with the identified search query (drawing reference 12; i.e. user selects another information from the results);

a module (0012; system) configured to determine a score (EPS, 0047) for the second piece of information (step 12, figure 1) based at least in part on the query factor (figure 1, drawing reference 16, and paragraphs 0017-0023; i.e. factors calculated for the Enhanced Popularity Score (EPS)) associated with the identified search query (figure 1, drawing reference 2 and figure 2; e.g. Q1);

a module (0012; system) configured to determine a second ranking sequence (0005, last 5 lines of 0038; i.e. the adjusting of final result rankings, and 0045 describes a ranking other than the original ranking) of the merged query result (fig. 2 and results from a query family) based at least in part on the score (figure 1, step 20 and figure 2); and

a module (drawing reference 6) configured to present the merged query result (fig. 2 and results from a query family) to the user according to the second ranking sequence (0010; i.e. results are returned to the user based upon the index (which has matured (0045) over the ranking process.)

With respect to claim 26, Barrett teaches the query system of claim 25, the computer further comprising:

a module (drawing reference 2) configured to receive a user input (0047); and

a module configured (drawing reference 6) to generate the plurality of search queries based on the user input (0043 and 0047).

With respect to claim 27, the query system of claim 25, further comprising a module configured for increasing a refresh rate of a display of the collection of information to the user (0004) responsive to receiving input signals (drawing reference 12) at a increasing frequency.

With respect to claim 28, the method of claim 1, wherein ranking the collection of information based on the score further comprises:

a module (12) configured to receive a second input signal (drawing reference 12) indicating a second interest in a third piece of information; and

a module configured to vary a refresh rate of a display of the merged query result (fig. 2 and results from a query family) to the user (0004) based at least in part on the duration between receiving the first input signal and the second input signal (0053, clicking behavior).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 17, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett as applied to claims 1-6, 8-15, 18-20, and 22-28 above in view of Corston-Oliver et al. ("Corston-Oliver" hereafter) U.S. Patent 6,295,529 B1).



With respect to claim 16 and similar claim 21, Barrett teaches generating the plurality of search queries based on a plurality of data streams; and executing the plurality of search queries (0003, line 2) for the plurality of search results (fig. 2 and results from a query family); and

Barrett, does not explicitly teach generating the plurality of search queries based on a plurality of data streams;

Corston-Oliver, however, teaches generating the plurality of search queries based on a plurality of data streams (col. 1, lines 50-55, col. 4 lines 25-34) for an implicit data request.

In the same field of endeavor, (i.e. information retrieval), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Corston-Oliver would have provided Barrett's system with expanded query defining capabilities for the benefit of not limiting a user to use one type of query. Corston-Oliver further would have given Barrett more efficient searching techniques for searching against a large index (i.e. Corston-Oliver at col. 2 line 50-54).

With respect to claim 17, Corston-Oliver teaches the method of claim 16, wherein the plurality of data streams comprise a data stream describing current contextual state of a user (col. 4 lines 25-34; i.e. a "FIND SAME" request).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett as applied to claims 1-6, 8-15, 18-20, and 22-28 above and further in view of Wical (U.S. Patent 5,940,199).

With respect to claim 7, Barrett does not appear to directly teach identifying parts of text typed by the user, the parts including at least two of the following: nouns, verbs, and proper nouns; and generating the plurality of search queries based on the identified parts.

Wical, however, teaches identifying parts of text typed by the user, the parts including at least two of the following: nouns, verbs, and proper nouns; and generating the plurality of search queries based on the identified parts (col. 8 line 40-64) for dividing a query into distinct parts to refer to a knowledge base.

Accordingly, in the same field of endeavor, (i.e. search and retrieval), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because the teachings of Wical would have given Barrett the advantage of parsing queries into parts of speech (e.g. nouns and verbs) for the benefit of determining different contexts of a query to search for. Ultimately, the query terms in Wical (which may be seen as a family of queries) would have further provided accuracy (e.g. col. 4 line 25, Wical) to produce more relevant results for a user in Barrett's invention.

#### ***Response to Arguments***

Applicant's arguments filed in the reply dated 9/12/2008 have been fully considered but they are not persuasive.

Applicant also argues (pages 13-14 of the reply) that Barrett does not disclose information retrieved from query results for a plurality of search queries. The Examiner disagrees and submits that Barrett discloses the use of a query family (0037) which is a grouping of queries to retrieve information. As another example of Barrett teaching this feature, figure 2 also shows a plurality of queries (e.g. Q1-Q4) with respective search results (Information A-D). For example, all queries Q1-Q4 contain information A (as well as B-C as a result). Therefore, the Examiner maintains that Barrett teaches this feature.

Applicant further asserts that Barrett only uses a single query to display a search result, not a merged query result (e.g. last 2 lines of page 13). The examiner respectfully disagrees because Barrett teaches using a query family (to suggest using a plurality of queries) to retrieve results. In other words, if a query family (plurality of queries) were issued on a database, it can be interpreted that each query in the family returns results. This can be illustrated by Barrett's figure 2 which shows multiple queries (Q1-Q4) returning results (Information A-D).

Applicant further asserts that multiple queries sharing a same piece of information in their result does not disclose (1) merging query results of multiple queries (2) displaying a merged query result associated with a plurality of search queries, and (3) identifying a search query from the plurality of queries associated with the merged query result. The Examiner disagrees because Barrett teaches:

- (1) multiple results (Information A-D) merged together from queries 1-4 (figure 2);
- (2) presenting the results to a user (0010); and

(3) identifying (giving each query Q1-Q4 a different EPS) a search query (e.g. Q1) from a plurality of the queries (Q2-Q4) associated with the merged query results (results produced from the query family).

Furthermore, the Examiner submits that (in the context of Barrett's figure 2) multiple queries sharing a same piece of information in their result does disclose the merging of query results because it can be seen that 1) each query Q1-Q4 producing a result (i.e. Information A retrieved for each query) suggests a plurality of query results or 2) multiple queries Q1-Q4 are associated with multiple results Information A-D to suggest merged results.

Applicant also argues in respect to claims 13 and 14 that Barrett does not disclose "varying a refresh rate of a display of the merged query result to the user based at least in part on the duration between receiving the first input signal and the second input signal. The Examiner submits as these claims remain abstractly recited, they have been given their broadest reasonable interpretation. That is, Barrett describes their system to allow a user to select pieces of information to gauge interest (e.g. Barrett 0012 disclosing the result satisfying the users need). The Examiner submits that the interest affects the display of the results in that a decay rate (e.g. negative score as a user selects *more* information 12) effectively refreshes the results to display the affected result to a lower ranking. Thus a user (e.g. with erratic behavior, 0016) describes varying a display at an increasing rate.

Furthermore, Examiner submits that Barrett teaches a ranking of results responding to user clicks (e.g. 0039). In this, the results display is seen as varied because they can be interpreted to be updated as they are demoted or moved up to produce a final ranking.

In response to the argument of claim 7, the examiner submits that in view of new grounds of rejection provided by the amendment, the new reference by Wical renders this argument moot.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ROBERT TIMBLIN/  
Examiner, Art Unit 2167

/John R. Cottingham/  
Supervisory Patent Examiner, Art Unit 2167